CLAIMS

We claim:

1. A motor core movable relative to a stator; the motor core comprising a base member and a plurality of adjacent tooth members, each tooth member comprising: a tooth surface;

tooth sides extending from said tooth surface toward said base member;

at least one of said tooth sides comprising a tip portion and a base portion said tip portion extending from said tooth surface to said base portion;

said base portion extending from said tip portion to an adjoining base portion of a tooth side of an adjacent tooth member;

wherein said tip portion is curved.

- 2. The motor core of claim 1 wherein said tip portion is curved concavely in relation to a transverse axis of said tooth..
- 3. The motor core of claim 1 wherein said tip portion has a substantially constant curvature.
- 4. The motor core of claim 1 wherein said tip portion and said base portion are substantially curved.
- 5. The motor core of claim 1 wherein said tip portion is curved and said base portion is substantially straight.
- 6. The motor core of claim 1 wherein the area of said tip portion is greater than or equal to the area of said base portion.

- 7. The motor core of claim 1 wherein the area of said tip portion is less than or equal to the area of said base portion.
- 8. The motor core of claim 1 wherein said motor core comprises a plurality of stacked laminations, each lamination comprising:

a tooth surface;

tooth sides extending between adjacent tooth surfaces;

said tooth sides comprising at least a tip portion extending from said tooth surface, and a base portion extending from said tip portion to a base portion of an adjacent tooth side.

- 9. The motor core of claim 1 wherein said tooth surface receives magnetic flux during the operation of the motor.
- 10. The motor core of claim 1 further including a stator, said stator comprising a plurality of stator teeth.
- 11. A motor core movable relative to a stator; the stator comprising a base member and a plurality of adjacent tooth members, each tooth member comprising:

a tooth surface:

tooth sides extending from said tooth surface toward said base member;

at least one of said tooth sides comprising a tip portion and a base portion said tip portion extending from said tooth surface to said base portion;

said base portion extending from said tip portion to an adjoining base portion of a tooth side of an adjacent tooth member;

wherein said tip portion is curved.

- 12. The stator of claim 11 wherein said tip portion is curved concavely in relation to a transverse axis of said tooth..
- 13. The stator of claim 11 wherein said tip portion has a substantially constant curvature.
- 14. The stator of claim 11 wherein said tip portion and said base portion are substantially curved.
- 15. The stator of claim 11 wherein said tip portion is curved and said base portion is substantially straight.
- 16. The stator of claim 11 wherein the area of said tip portion is greater than or equal to the area of said base portion.
- 17. The stator of claim 11 wherein the area of said tip portion is less than or equal to the area of said base portion.
- 18. The stator of claim 11 wherein said stator comprises a plurality of stacked laminations, each lamination comprising:

a tooth surface;

tooth sides extending between adjacent tooth surfaces;

said tooth sides comprising at least a tip portion extending from said tooth surface, and a base portion extending from said tip portion to a base portion of an adjacent tooth side.

- 19. The stator of claim 11 wherein said tooth surface receives magnetic flux during the operation of the motor.
- 20. The stator of claim 11 further including a stator, said stator comprising a plurality of stator teeth.